

Title (en)

MULTI-CHIP MODULE AND PROXIMITY COMMUNICATION BETWEEN CHIPS IN THE MODULE

Title (de)

MEHRCHIPMODUL UND PROXIMITÄTSKOMMUNIKATION ZWISCHEN CHIPS IN DEM MODUL

Title (fr)

MODULE MULTIPUCE ET COMMUNICATION DE PROXIMITÉ ENTRE DES PUCES DANS LE MODULE

Publication

**EP 2218103 A1 20100818 (EN)**

Application

**EP 08835081 A 20080911**

Priority

- US 2008076047 W 20080911
- US 86440807 A 20070928

Abstract (en)

[origin: US2009085183A1] Embodiments of a multi-chip module (MCM) are described. This MCM includes a first semiconductor die and a second semiconductor die, where a given semiconductor die, which can be the first semiconductor die or the second semiconductor die, includes proximity connectors proximate to a surface of the given semiconductor die. Moreover, the given semiconductor die is configured to communicate signals with the other semiconductor die via proximity communication through one or more of the proximity connectors. Furthermore, the MCM includes an alignment plate and a top plate coupled to the alignment plate. This alignment plate includes a first negative feature configured to accommodate the first semiconductor die and a second negative feature configured to accommodate the second semiconductor die, and the top plate includes a positive feature. Note that the positive feature is coupled to the first semiconductor die, and the positive feature facilitates mechanical positioning of the first semiconductor die.

IPC 8 full level

**H01L 25/065** (2006.01); **H01L 23/48** (2006.01)

CPC (source: EP US)

**H01L 23/10** (2013.01 - EP US); **H01L 23/48** (2013.01 - EP US); **H01L 24/02** (2013.01 - US); **H01L 24/16** (2013.01 - EP US); **H01L 24/72** (2013.01 - EP US); **H01L 24/95** (2013.01 - EP US); **H01L 25/0652** (2013.01 - EP US); **H01L 24/81** (2013.01 - EP US); **H01L 25/50** (2013.01 - EP US); **H01L 2224/0401** (2013.01 - EP US); **H01L 2224/13099** (2013.01 - EP US); **H01L 2224/73251** (2013.01 - EP US); **H01L 2224/81136** (2013.01 - EP US); **H01L 2224/81801** (2013.01 - EP US); **H01L 2224/95136** (2013.01 - EP US); **H01L 2225/06513** (2013.01 - EP US); **H01L 2225/06531** (2013.01 - EP US); **H01L 2225/06534** (2013.01 - EP US); **H01L 2225/06593** (2013.01 - EP US); **H01L 2924/01004** (2013.01 - EP US); **H01L 2924/01006** (2013.01 - EP US); **H01L 2924/01013** (2013.01 - EP US); **H01L 2924/01014** (2013.01 - EP US); **H01L 2924/01019** (2013.01 - EP US); **H01L 2924/01023** (2013.01 - EP US); **H01L 2924/01029** (2013.01 - EP US); **H01L 2924/01033** (2013.01 - EP US); **H01L 2924/01058** (2013.01 - EP US); **H01L 2924/01067** (2013.01 - EP US); **H01L 2924/01074** (2013.01 - EP US); **H01L 2924/01076** (2013.01 - EP US); **H01L 2924/01079** (2013.01 - EP US); **H01L 2924/01082** (2013.01 - EP US); **H01L 2924/014** (2013.01 - EP US); **H01L 2924/10157** (2013.01 - EP US); **H01L 2924/10158** (2013.01 - EP US); **H01L 2924/10253** (2013.01 - EP US); **H01L 2924/14** (2013.01 - EP US); **H01L 2924/1433** (2013.01 - EP US); **H01L 2924/351** (2013.01 - EP US)

C-Set (source: EP US)

1. **H01L 2924/10253 + H01L 2924/00**
2. **H01L 2924/351 + H01L 2924/00**
3. **H01L 2224/73251 + H01L 2224/16 + H01L 2224/72**

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**US 2009085183 A1 20090402; US 7893531 B2 20110222**; EP 2218103 A1 20100818; EP 2218103 B1 20200902; TW 200933870 A 20090801; TW I447891 B 20140801; US 2011111559 A1 20110512; US 8039308 B2 20111018; WO 2009045693 A1 20090409

DOCDB simple family (application)

**US 86440807 A 20070928**; EP 08835081 A 20080911; TW 97135880 A 20080918; US 2008076047 W 20080911; US 201113006227 A 20110113